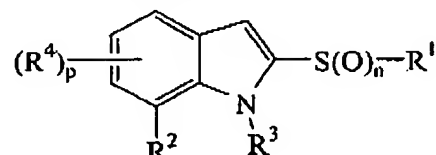


Atty Docket No.: R0147B-REG
USSN: 10/663,314

Claim Listing

1. (Previously Presented) A compound of the formula:



or a pharmaceutically acceptable salt thereof,
wherein

n is 0, 1 or 2;

p is 1 or 2;

R¹ is aryl;

R² is a heterocyclyl;

R³ is hydrogen, alkyl, or -C(=O)-R⁵, where R⁵ is alkyl, alkoxy, aryl, or
aryloxy; and

each R⁴ is independently hydrogen, hydroxy, cyano, alkyl, alkoxy,
thioalkyl, alkylthio, halo, haloalkyl, hydroxyalkyl, nitro,
alkoxycarbonyl, alkylcarbonyl, alkylsulfonyl, arylsulfonyl,
haloalkylsulfonyl, amino, alkylamino, dialkylamino,
alkyl(aryl)amino, alkylaminocarbonyl, alkylcarbonylamino,
alkylcarbonyl(alkylamino), alkylaminosulfonyl,
alkylsulfonylamino or methylenedioxyhydrogen, alkyl, alkoxy,
halo, or haloalkyl.

2. (Original) The compound according to Claim 1, wherein p is 1 and
R⁴ is located at the 6-position of the indole ring system.

3. (Original) The compound according to Claim 1, wherein R² is
optionally substituted piperazin-1-yl or optionally substituted piperidin-4-yl.

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4. (Original) The compound according to Claim 3, wherein R² is piperazin-1-yl, 4-methylpiperazin-1-yl, 3,5-dimethylpiperazin-1-yl, N-methyl piperidin-4-yl or piperidin-4-yl.

5. (Original) The compound according to Claim 4, wherein R² is 4-methylpiperazin-1-yl.

6. (Previously Presented) The compound according to Claim 3, wherein R¹ is optionally substituted phenyl.

7. (Previously Presented) The compound according to Claim 6, wherein R¹ is phenyl which is optionally substituted with alkyl, halo or haloalkyl.

8. (Previously Presented) The compound according to Claim 7, wherein R¹ is phenyl, 2,3-dichlorophenyl, 2-fluorophenyl, 2-methylphenyl, 2-trifluoromethylphenyl, or 3-bromophenyl.

9. (Original) The compound according to Claim 6, wherein n is 2.

10. (Original) The compound according to Claim 9, wherein R³ is hydrogen, methyl, or -C(=O)-R⁵, where R⁵ is alkoxy.

11. (Previously Presented) The compound according to Claim 1, wherein R¹ is phenyl which is optionally substituted with a substituent selected from the group consisting of alkyl, halo and haloalkyl.

12. (Previously Presented) The compound according to Claim 11, wherein R¹ is phenyl, 2,3-dichlorophenyl, 2-fluorophenyl, 2-methylphenyl, 2-trifluoromethylphenyl, or 3-bromophenyl.

13. (Original) The compound according to Claim 11, wherein n is 2.

14. (Original) The compound according to Claim 13, wherein R² is optionally substituted piperazin-1-yl or optionally substituted piperidin-4-yl.

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15. (Original) The compound according to Claim 14, wherein R^2 is piperazin-1-yl, 4-methylpiperazin-1-yl, 3,5-dimethylpiperazin-1-yl, N-methyl piperidin-4-yl or piperidin-4-yl.

16. (Original) The compound according to Claim 15, wherein R^3 is hydrogen, methyl or $-C(=O)-R^5$, where R^5 is alkoxy.

17. (Original) The compound according to Claim 1, wherein n is 2.

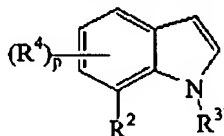
18. (Previously Presented) The compound according to Claim 17, wherein R^1 is phenyl which is optionally substituted with a substituent selected from the group consisting of alkyl, halo, haloalkyl, and a mixture thereof.

19. (Original) The compound according to Claim 18, wherein R^2 is optionally substituted piperazin-1-yl or optionally substituted piperidin-4-yl.

20. (Original) The compound according to Claim 19, wherein R^3 is hydrogen, methyl or $-C(=O)-R^5$, where R^5 is alkoxy.

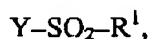
21. (Original) The compound according to Claim 1, wherein said compound is 2-benzenesulfonyl-7-(4-methylpiperazin-1-yl)-1H-indole.

22. (Previously presented) A method for producing a compound of claim 1, said method comprising contacting a substituted indole of the formula:

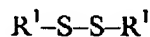


wherein $R^{3'}$ is alkyl or $-C(=O)-R^5$, and p, R^2 , R^4 and R^5 are as recited in claim 1

- (i) with a base to produce a deprotonated indole; and
- (ii) contacting the deprotonated indole with a sulfonylating agent of the formula:

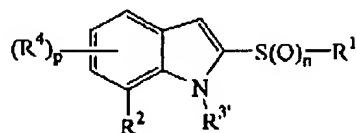


where Y is halide and R^1 is as recited in claim 1, or a disulfide agent of the formula:



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to produce a 2-substituted indole of the formula:



(iii) optionally oxidizing the sulfur with an oxidizing agent; and

(iv) optionally removing the-group $\text{R}^{3'}$ to produce the compound of claim 1

wherein R^3 is hydrogen.

23. (Original) The method of Claim 22, wherein Y is fluorine.

24. (Original) A composition comprising:

- (a) a therapeutically effective amount of a compound of Claim 1; and
- (b) a pharmaceutically acceptable carrier.

25. (Previously presented) A method for enhancing cognitive memory in Alzheimer's patients, said method comprising administering to said patient a therapeutically effective amount of a compound of Claim 1.

26. (Canceled)

27. (Canceled)

28. (Canceled)